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AMENDMENTS TO THE CLAIMS:

1. (currently amended) A method of forwarding packets in a communication system having multiple incoming <u>service interfaces</u> and <u>multiple</u> output service interfaces for providing service to multiple distinct and isolated user networks, said method comprising:

maintaining providing said system with multiple forwarding rules, said forwarding rules based on routing topology and policing information relevant to each of said distinct and isolated user networks;

receiving said packets at one of said incoming service interfaces; selecting an appropriate forwarding rule based on a source address in said packets; and

forwarding said packets to one of said output service interfaces, the decision as to which output service interface to forward the packets to being based on a destination address in said packets and information in said forwarding rules selected forwarding rule.

- 2. (currently amended) The method as defined in claim 1 wherein said services service interfaces support realms, each <u>realm</u> relating to a specific instance of an internetworking service function.
- 3. (previously amended) The method as defined in claim 2 wherein said specific instance is a public Internet access service.
- 4. (previously amended) The method as defined in claim 2 wherein said specific instance is a virtual private network (VPN) service.
- 5. (previously amended) The method as defined in claim 4 wherein said VPN service is a bridged and/or routed connectivity service.
- 6. (previously amended) The method as defined in claim 4 wherein said VPN service is a network layer connectivity service.

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- 7. (previously amended) The method as defined in claim 1 wherein said communication system includes an ATM transport fabric.
- 8. (currently amended) A packet forwarding entity for a communication system comprising:

a plurality of distinct and isolated user networks;

multiple service interfaces providing instances of service to one of said specific distinct and isolated user networks;

multiple route servers for calculating multiple forwarded forwarding rules relating to instances of service to which said service interfaces belong based on routing, topology and policing information; and

edge forwarders to direct said service interfaces to user networks based on information in said forwarding rules.

- 9. (cancelled)
- 10. (cancelled)
- 11. (currently amended) The packet forwarding entity as defined in claim 8 wherein <u>said</u> service interfaces related to physical and logical connections.
- 12. (previously amended) The packet forwarding entity as defined in claim 11 wherein said logical connections include multiple traffic flows from one or more ingress ports.
- 13. (currently amended) The packet forwarding entity as defined in claim 8 wherein said one of said instances of <u>service</u> services is an internetworking service function.
- 14. (previously amended) The packet forwarding entity as defined in claim 13 wherein said internetworking service function is a Public Internet access service.

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- 15. (previously amended) The packet forwarding entity as defined in claim 13 wherein said internetworking service function is a virtual private network (VPN) service.
- 16. (previously amended) The packet forwarding entity as defined in claim 15 wherein said VPN service is a bridged and/or routed connectivity service.
- 17. (currently amended) The packet forwarding entity as defined in claim 16 wherein said internetworking service <u>function is</u> functions are provided over an ATM network.
- 18. (currently amended) The packet forwarding entity as defined in claim 16 wherein said internetworking service function supports devices support multiple protocols.
- 19. (currently amended) The packet forwarding entity as defined in claim 18 wherein said internetworking service function provides devices provide services at both the packet and frame levels.
- 20. (currently amended) The packet forwarding entity as defined in claim 19 wherein said internetworking service function is services are managed by a single service provider.
- 21. (currently amended) The packet forwarding entity as defined in claim 18 wherein said multiple protocols include <u>Multi-protocol</u> over ATM (MPOA) service via a MPOA client lookup cache management function.
- 22. (cancelled)